

DERWENT-ACC-NO: 1997-334465

DERWENT-WEEK: 199731

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TITLE: Brass wind instrument with valves or slides has running surfaces with coating of titanium nitride or diamond-like carbon, which has thickness of from 1 to 8 micrometres

PATENT-ASSIGNEE: VOIGT J[VOIGI]

PRIORITY-DATA: 1997DE-2005540 (March 27, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
DE 29705540 U1	June 26, 1997	DE

INT-CL-CURRENT:

TYPE	IPC	DATE
CIPS	G10D7/00	20060101

ABSTRACTED-PUB-NO: DE 29705540 U1

BASIC-ABSTRACT:

The instrument has valves or slides, which have coated running surfaces. The coating is of titanium nitride or diamond-like carbon, and has a thickness of from 1 to 8 micrometres.

The instrument may be a slide trombone, whose inner slide tubes (2) have a titanium nitride coating (3) with a thickness of 3 micrometres. It may also be a brass instrument with rotary valves, whose rotors have a coating of diamond-like carbon with a thickness of 2 micrometres. The use of a coated valve rotor, which is lighter than an equivalent rotor made entirely from titanium, is also discussed.

ADVANTAGE - Reduces friction, and uses less material than the conventional, thicker hard chromium coating.

CHOSEN-DRAWING: Dwg.1/2

TITLE-TERMS: BRASS WIND INSTRUMENT VALVE SLIDE RUN SURFACE  
COATING TITANIUM  
NITRIDE CARBON THICK

DERWENT-CLASS: P86

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: 1997-277512